**Note Outline: Newton’s Gravity**

**I. Who was Sir Isaac Newton? (1643-1727)**

A.

B.

C.

i. “Nature and Nature’s laws lay hid in night: God said, “Let Newton be!” and all was light.” – Alexander Pope

**II. What were Newton’s contributions to Science?**

A. Law of Inertia:

B. F = ma:

C. Action/reaction law:

D. Universal Law of Gravity

**III. Universal Law of Gravity?**

A. Gravity: hard to define.

B. Newton’s famous formula for the gravitational force between masses M and m:

C. The Law states: Any two objects of masses M and m separated from each other by a distance, r, attract each other with a force, F, called gravity, that is directly proportional to the product of their masses and inversely proportional to the square of their distance away from each other.

**IV. What did the discovery of this law lead to?**

A.

i.